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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,776	09/10/2003	Thomas E. Mullan	116807	3910
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EXAMINER AJAYI, JOEL				
ART UNIT 2617		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/658,776

Applicant(s)

MULLAN ET AL.

Examiner

JOEL AJAYI

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10-13, 15, 16, 18, 19 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-13, 15, 16, 18, 19, and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to Applicant's amendment filed on May 21, 2007. **Claims 1-3, 5-8, 10-13, 15, 16, 18, 19, and 22** are still pending in the present application. **This action is made FINAL.**

Response to Arguments

Applicant's arguments filed May 21, 2008 have been fully considered but they are not persuasive.

The argument features that Criqui is intended to address a very specific problem.

The applicant's invention relates to systems and methods for communicating from a mobile airborne user to and from a remote network. Criqui's invention also relates to a mobile user aboard an aircraft (airborne) which communicates with a remote network (paragraphs 3 and 12).

The argument features the compatibility of Montebruno and Criqui.

The examiner respectfully disagrees with the applicant's statement and asserts that Criqui et al. discloses providing services to a mobile user from a remote network (paragraphs 9, 10, and 12), while Montebruno et al. also discloses providing services to a mobile user from a remote network at a higher rate (paragraphs 3-6, and 63). Therefore, it would have been obvious to modify the teaching of Criqui by including the availability of services at a higher rate, as taught by Montebruno.

The argument features the return signal and the forward link signal are being transmitted on a same frequency and via a same transponder in the satellite.

The examiner respectfully disagrees with the applicant's statement and asserts that Criqui et al. discloses a bidirectional radio link provided via a satellite (paragraph 23, lines 1-3). In applicant's specification, applicant states that a single frequency range corresponds to a transponder on the satellite (paragraph 6). Therefore a single satellite using a single frequency on a single transponder can be used to provide a bi-directional communication (paragraph 19). A transponder is a satellite receiver and transmitter. Criqui discloses a satellite transponder/transmitter and receiver that provides bi-directional communication (diagram and paragraph 23, lines 1-3) on a single frequency, because a single frequency corresponds to a transponder.

The argument features the return signal requesting and the forward signal enabling broadband communication with the one or more individual data terminal devices. The examiner respectfully disagrees with the applicant's statement and asserts that Montebruno et al. discloses providing uplink and downlink services at a higher data rate (broadband) with at least one user (paragraphs 3-6, 10, and 63).

In addition, it is noted that claim 1 is an apparatus /system claim and is patently defined by the actual structural limitations claimed and applicant seems to be relying on recitations in the preamble and functional recitations in the body for patentability. Structurally, it is not seen how the instant claims distinguish over the prior art. Similarly, claim 11 is a method / process claim with active steps defining the patentable process, however applicant is relying on the passive functions not actively claimed as part of the patentable process, for patentability.

In view of the above, the rejection using Criqui and Montebruno is maintained as repeated below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 5-8, 11-13, 15, 16, 18, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Criqui et al. (U.S. Patent Application Number: 2002/0123344)** in view of **Montebruno et al. (U.S. Patent Application Number: 2004/0192198)**.

Consider **claim 1**; Criqui discloses a mobile platform high-speed broadband communications system for a mobile platform, mobile platform high-speed broadband communications systems comprising:

A mobile communications terminal having a single first antenna, the mobile communications terminal being mounted in a vehicle (aircraft) and in two-way communication one or more individual data terminal devices (BSS1) in the vehicle and with a satellite through the first antenna; and a base station (BSS2) in two way communication with the satellite, wherein a return link signal is transmitted from the first antenna of the mobile communications terminal via the satellite to the base station, and a forward link signal controlled by the base station is transmitted from the base station via the satellite and the first antenna to the mobile communications terminal; via the same transponder in the satellite (drawing); the return signal requesting and the forward signal enabling broadband communication with the one or more individual data terminal devices (paragraph 20, 21, 23).

Criqui fails to disclose that the return and forward signal are being transmitted on the same frequency, and the forward link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps.

In the same field of endeavor Monteburno discloses that the return and forward signal are being transmitted on the same frequency (UMTS and LAN frequency, paragraph 68), and the forward link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps (paragraph 6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Montebruno into the method of Criqui in order to provide a wider bandwidth for communications.

Consider **claim 11**; Criqui discloses a method for high-speed broadband communicating for a mobile platform, the method comprising:

Transmitting a first signal from a mobile communications terminal mounted in a vehicle (aircraft) via a first antenna and a satellite to a base station (BSS2); and transmitting a second signal controlled by the base station from the base station via the satellite and the first antenna to the mobile communication terminal, wherein the second signal is controlled by the base station in response to a data request contained in the first signal; the second signal enables broadband communication with one or more individual data terminal devices (BSS1) in the vehicle (paragraph 20, 21, 23).

Criqui fails to disclose that the first and second signals are being transmitted on the same frequency, and the second link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps.

In the same field of endeavor Montebruno discloses that the first and second signal are being transmitted on the same frequency (UMTS and LAN frequency, paragraph 68), and the second link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps (paragraph 6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Montebruno into the method of Criqui in order to provide a wider bandwidth for communications.

Consider **claim 18**; Criqui discloses a method for high-speed broadband communicating for a mobile platform, the method comprising:

Generating a first signal in a mobile communications platform in a vehicle (aircraft) based on a request from a data terminal device (BSS1) in the vehicle in two-way communication with the mobile communications terminal; transmitting the first signal from the mobile communications terminal via an antenna in the vehicle and a satellite via the satellite to a base station (BSS2); relaying a data request contained in the first signal from the base station to a node of a remote network; receiving, at the base station, data in response to the data request from the node of the remote network; transmitting a second signal comprising the data received from the node of the remote network from the base station via the satellite to the mobile communications terminal; and transmitting the data contained in the second signal from the mobile communications terminal to the data terminal device in the vehicle, wherein the second signal is controlled by the base station in response to the data request contained in the first signal, and the second signal enables broadband communication from the mode of the remote network to the data terminal device in the vehicle (paragraph 20, 21, 23).

Criqui fails to disclose that the first and second signals are being transmitted on the same frequency, and the second signal uses a signaling rate in a range from 512 kbps to 3.5 Mbps.

In the same field of endeavor Montebruno discloses that the first and second signal are being transmitted on the same frequency (UMTS and LAN frequency, paragraph 68), and the second link signal uses a signaling rate in a range from 512 kbps to 3.5 Mbps (paragraph 6).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Montebruno into the method of Criqui in order to provide a wider bandwidth for communications.

Consider **claims 2, 16, 22**; Criqui discloses that the vehicle is an aircraft and the mobile communications terminal and the first antenna are compatible with size, weight and power constraints of the aircraft (paragraph 20 and 21).

Consider **claim 3**; Criqui discloses that the first antenna is capable of maintaining a communications lock on the satellite when the vehicle is in motion (paragraph 20 and 21).

Consider **claim 5**; Criqui discloses that the base station links the one or more individual data terminal devices in the vehicle to a remote network via the mobile communications terminal and the satellite for broadband communication between the one or more individual data terminal devices and the remote network (paragraph 20 and 21).

Consider **claim 6**; Montebruno discloses that the remote network is a private network (paragraph 48).

Consider **claim 7**; Montebruno discloses that the remote network is the Internet (paragraph 48).

Consider **claim 8**; Montebruno discloses that the communication between the remote network and the base station is a two-way communication; the return link signal is a request for data from the Internet; and the forward link signal is a response to the request (paragraph 48).

Consider **claims 12, 19**; Criqui discloses that the first and second signal are transmitted at different times (paragraph 20 and 21).

Consider **claim 13**; Criqui discloses generating at the base station the second signal in response to the first signal (paragraph 20 and 21).

Consider **claim 15**; Criqui discloses generating, in the mobile communications terminal, the first signal in response to a data communication request from the one or more individual data terminal devices in the vehicle, the one or more individual terminal devices being in two-way communication with the mobile communications terminal (paragraph 20 and 21).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Criqui et al. (U.S. Patent Application Number: 2002/0123344)** in view of **Montebruno et al. (U.S. Patent Application Number: 2004/0192198)**, and further in view of **Douglas et al. (U.S. Patent Number: 6,505,054)**.

Consider **claim 10**; Criqui and Montebruno fail to disclose that the mobile communications terminal comprises of a second antenna for communicating with a receiver other than the satellite.

In the same field of endeavor Douglas discloses that the mobile communications terminal comprises of a second antenna for communicating with a receiver other than the satellite (column 3, lines 63-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Douglas into the method of Criqui and Montebruno in order to provide improved wireless communications devices.

Conclusion

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday 7:30am to 4:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Joel Ajayi

/Lester Kincaid/

Supervisory Patent Examiner, Art Unit 2617